

be approved by the Chief, Aircraft Certification Staff, AEU-100, Europe, Africa, and Middle East Region, FAA, c/o American Embassy, Brussels, Belgium.

(Secs. 313(a), 601, and 603, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1421, and 1423); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); 14 CFR 11.85.)

NOTE.—The Federal Aviation Administration has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821, as amended by Executive Order 11949, and OMB Circular A-107.

Issued in Washington, D.C., on December 1, 1977.

J. A. FERRARESE,
Acting Director,
Flight Standards Service.

[FR Doc. 77-35552 Filed 12-14-77; 8:45 am]

[4910-13]

[14 CFR Part 71]

[Airspace Docket No. 77-CE-27]

TRANSITION AREA, COLUMBIA, MO.

Proposed Alteration

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of Proposed Rule Making (NPRM).

SUMMARY: This notice proposes to alter the 700-foot transition area at Columbia, Missouri, to provide additional controlled airspace for aircraft executing a new instrument approach procedure to the E. W. Cotton Woods Memorial Airport, Columbia, Missouri, which is based on the Hallsville, Missouri VORTAC.

DATES: Comments must be received on or before January 19, 1978.

ADDRESSES: Send comments on the proposal to: Federal Aviation Administration, Chief, Operations, Procedures and Airspace Branch, Air Traffic Division, ACE-530, 601 East 12th Street, Kansas City, Mo. 64106, telephone 816-374-3408. The official docket may be examined at the Office of the Regional Counsel, Central Region, Federal Aviation Administration, Room 1558, 601 East 12th Street, Kansas City, Mo.

An informal docket may be examined at the Office of the Chief, Operations, Procedures and Airspace Branch, Air Traffic Division.

FOR FURTHER INFORMATION CONTACT:

Dwaine E. Hiland, Airspace Specialist, Operations, Procedures and Airspace Branch, Air Traffic Division, ACE-537, FAA, Central Region, 601 East 12th Street, Kansas City, Mo. 64106, telephone 816-374-3408.

SUPPLEMENTARY INFORMATION:

COMMENTS INVITED

Interested persons may participate in the proposed rule making by submitting

such written data, views or arguments as they desire. Communications should identify the airspace docket number, and be submitted in duplicate to the Operations, Procedures and Airspace Branch, Air Traffic Division, Federal Aviation Administration, 601 East 12th Street, Kansas City, Missouri 64106. All communications received on or before January 19, 1978 will be considered before action is taken on the proposed amendment. The proposal contained in this notice may be changed in light of the comments received. All comments received will be available both before and after the closing date for comments in the Rules Docket for examination by interested persons.

AVAILABILITY OF NPRM

Any person may obtain a copy of this NPRM by submitting a request to the Federal Aviation Administration, Operations, Procedures and Airspace Branch, 601 East 12th Street, Kansas City, Mo. 64106 or by calling (816) 374-3408. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for further NPRMs should also request a copy of Advisory Circular No. 11-2 which describes the application procedure.

THE PROPOSAL

The FAA is considering an amendment to Subpart C, Section 71.181 of the Federal Aviation Regulations (14 CFR Sec. 71.181) by altering the 700-foot transition area at Columbia, Missouri. To enhance airport usage, a new instrument approach procedure to the E.W. Cotton Woods Memorial Airport, Columbia, Missouri, is being established based on the Hallsville, Missouri VORTAC, a navigational aid. The establishment of an instrument approach procedure based on this navigational aid entails alteration of the transition area at and above 700-feet Above Ground Level (AGL) within which aircraft will be provided additional controlled airspace protection. The intended effect of this action is to ensure segregation of aircraft using the new approach procedure under instrument flight rules (IFR) and other aircraft operating under visual flight rules (VFR). Section 71.181, pertaining to transition areas was republished in the FEDERAL REGISTER on January 3, 1977 (42 FR 440).

Accordingly, the Federal Aviation Administration proposes to amend Subpart G, Section 71.181, of the Federal Aviation Regulations (14 CFR 71.181) as republished on January 3, 1977 (42 FR 440), by altering the following transition area:

COLUMBIA, MISSOURI

That airspace extending upward from 700 feet above the surface and within a 5-mile radius of the E. W. Cotton Woods Memorial Airport (Latitude 39°00'15" N., Longitude 92°17'45" W.); within 1½ miles each side of the Hallsville, Missouri, VORTAC 224° radial extending from the 5-mile radius area to the Hallsville, Missouri, VORTAC; and

within an 8½ mile radius of Columbia Regional Airport (Latitude 38°48'49" N., Longitude 92°13'12" W.); within 2½ miles each side of the Hallsville, Missouri, VORTAC 193° radial extending from the 8½ mile radius to 10 miles south of the VORTAC; excluding the portion which overlies the Jefferson City, Missouri, 700-foot floor transition area.

(Sec. 307(a), Federal Aviation Act of 1958 as amended (49 U.S.C. 1348); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); sec. 11.61 of the Federal Aviation Regulations (14 CFR 11.61).)

NOTE.—The Federal Aviation Administration has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821, as amended by Executive Order 11949, and OMB Circular A-107.

Issued in Kansas City, Missouri, on December 2, 1977.

JOHN E. SHAW,
Acting Director, Central Region.

[FR Doc. 77-35641 Filed 12-14-77; 8:45 am]

[4910-13]

[14 CFR Part 73]

[Airspace Docket No. 77-SO-53]

TEMPORARY RESTRICTED AREAS

Proposed Establishment

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking.

SUMMARY: This notice supplements a previously published notice of proposed rule making concerning the designation of temporary restricted areas near the southern coast of Puerto Rico to contain a major joint service military exercise called "SOLID SHIELD 78." The proposal contained in this supplemental notice would establish more restricted area air space than was proposed in the original notice since the using agency has determined that this is necessary for the accomplishment of its mission.

DATE: Comments must be received on or before January 16, 1978.

ADDRESSES: Send comments on the proposal in triplicate to: Director, FAA Southern Region, Attention: Chief, Air Traffic Division, Docket No. 77-SO-53, Box 20636, Atlanta, Ga. 30320.

The official docket may be examined at the following location: FAA Office of the Chief Counsel, Rules Docket, (AGC-24), Room 916, 800 Independence Avenue SW., Washington, D.C. 20591. An informal docket may be examined at the office of the Regional Air Traffic Division.

FOR FURTHER INFORMATION CONTACT:

Mr. Wray McClung, Airspace Regulations Branch (AAT-230), Airspace and Air Traffic Rules Division, Air Traffic Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, D.C. 20591; telephone: 202-426-8525.

SUPPLEMENTARY INFORMATION:

COMMENTS INVITED

Interested persons may participate in the proposed rule making by submitting such written data, views or arguments as they may desire. Communications should identify the airspace docket number and be submitted in triplicate to the Director, Southern Region, Attention: Chief, Air Traffic Division, Federal Aviation Administration, P.O. Box 20636, Atlanta, Ga. 30320. All communications received on or before January 16, 1978, will be considered before action is taken on the proposed amendment. The proposal contained in this notice may be changed in the light of comments received. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons.

AVAILABILITY OF NPRM

Any person may obtain a copy of this notice of proposed rule making (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-430, 800 Independence Avenue SW., Washington, D.C. 20591, or by calling 202-426-8058. Communications must identify the docket number of this NPRM. Persons interested in being placed on a mailing list for future NPRMs should also request a copy of Advisory Circular No. 11-2 which describes the application procedures.

THE PROPOSAL

The FAA is considering an amendment to Subpart B of Part 73 of the Federal Aviation Regulations (14 CFR Part 73) which would designate six temporary restricted areas identified as R-7105A, R-7105B, 7105C, R-7105D, R-7105E and R-7105F near the southern coastline of Puerto Rico to contain a major joint service military exercise known as "SOLID SHIELD 78." A temporary Warning Area, W-372, would be established south of the temporary restricted areas through non-rule making procedures. This proposal is supplemental to a notice of proposed rule making published in the FEDERAL REGISTER on December 1, 1977 (42 FR 61049) which proposed establishment of only three restricted areas for this exercise. Subsequent to publication of the original notice the Commander in Chief, U.S. Atlantic Fleet (CINCLANT) requested additional restricted airspace for air operations necessary for the successful completion of SOLID SHIELD 78. CINCLANT emphasized that the additional airspace is essential, and that additional airspace is proposed herein.

Exercise plans provide for airborne and amphibious operations within the Puerto Rico area and airborne operations on Vieques. Land and naval based aircraft, both fixed and rotary wing, will support all phases of the exercise. Ground forces will be continuously supported and resupplied by aircraft employing a variety of delivery means. Jet fighter and attack

aircraft will conduct extensive close air support missions including simulated bombing, rocket, and strafing attacks. Jet reconnaissance aircraft will conduct missions throughout the exercise area. Total exercise sorties from all the military services are estimated at 248 daily for fixed wing and 623 daily for helicopters. Exercise activity will be of such intensity that entry of nonexercise aircraft into the areas would seriously degrade aircraft safety. Pilots engaged in this type activity may not be able to properly clear the area to avoid nonparticipating aircraft, and a hazardous situation could exist if nonexercise aircraft were permitted in the areas while the exercise is in progress. There will be no live ordnance expended nor supersonic flights conducted within the exercise airspace.

The Commander in Chief, U.S. Atlantic Fleet, will designate an exercise airspace manager who will issue notices in pictorial and textual form announcing and describing air activity within the approved exercise airspace. These notices will be in addition to NOTAMS published by the FAA. The designated airspace manager will establish communications with appropriate air route traffic control centers so that nonexercise aircraft may be cleared through the restricted/warning areas when not being used for exercise purposes.

DRAFTING INFORMATION

The principal authors of this document are Mr. Wray McClung, Air Traffic Service, and Mr. Jack P. Zimmerman, Office of the Chief Counsel.

THE PROPOSED AMENDMENT

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend Part 73 of the Federal Aviation Regulations (14 CFR Part 73) as republished (42 FR 657) as follows:

In § 73.71 (42 FR 704) the following temporary restricted areas are added:

1. R-7105A—PONCE, P.R.

Boundaries. Beginning at Lat. 18°15'00" N., Long. 66°30'00" W.; to Lat. 18°15'00" N., Long. 66°01'00" W.; to Lat. 18°07'00" N., Long. 65°59'20" W.; to Lat. 18°01'00" N., Long. 66°30'00" W.; thence to point of beginning.

Altitudes. 8,000 feet MSL to but not including FL 250.

Time of use. Continuous, May 10, 1978, through May 23, 1978.

Controlling agency. FAA, San Juan ARTC Center.

Using agency. United States Atlantic Command, Norfolk, Va.

2. R-7105B—PONCE, P.R.

Boundaries. Beginning at Lat. 18°07'00" N., Long. 66°30'00" W.; to Lat. 18°07'00" N., Long. 65°59'20" W.; to Lat. 17°55'30" N., Long. 65°56'30" W.; thence west 3 NM from and parallel to the shoreline to Lat. 17°56'30" N., Long. 66°30'00" W.; thence to point of beginning.

Altitudes. Surface to but not including FL 250.

Time of use. Continuous, May 10, 1978, through May 23, 1978.

Controlling agency. FAA, San Juan ARTC Center.

Using agency. United States Atlantic Command, Norfolk, Va.

3. R-7105C—PONCE, P.R.

Boundaries. Beginning at Lat. 18°15'00" N., Long. 66°45'00" W.; to Lat. 18°15'00" N., Long. 66°30'00" W.; to Lat. 17°48'00" N., Long. 66°30'00" W.; thence northwest and west along Warning Area W-371B to Lat. 17°55'00" N., Long. 66°45'00" W.; thence to point of beginning.

Altitudes. Surface to but not including FL 280, excluding the airspace within R-7105E.

Time of use. Continuous, May 10, 1978 through May 23, 1978.

Controlling Agency. FAA, San Juan ARTC Center.

Using agency. United States Atlantic Command, Norfolk, Va.

4. R-7105D—PONCE, P.R.

Boundaries. Beginning at Lat. 18°15'00" N., Long. 66°30'00" W.; to Lat. 18°15'00" N., Long. 66°01'00" W.; to Lat. 18°07'00" N., Long. 65°59'20" W.; to Lat. 18°07'00" N., Long. 66°30'00" W.; thence to point of beginning.

Altitudes. Surface to but not including 8,000 feet MSL.

Time of use. Continuous, May 10, 1978, through May 23, 1978.

Controlling agency. FAA, San Juan ARTC Center.

Using agency. United States Atlantic Command, Norfolk, Va.

5. R-7105E—PONCE, P.R.

Boundaries. Beginning at Lat. 18°15'00" N., Long. 66°45'00" W.; to Lat. 18°04'30" N., Long. 66°35'30" W.; thence east along the 5 SM arc of the Ponce control zone to Lat. 18°03'00" N., Long. 66°30'00" W.; to Lat. 17°48'00" N., Long. 6°30'00" W.; thence west along W-371B to Lat. 17°55'00" N., Long. 66°45'00" W.; thence to point of beginning.

Altitudes. Surface to but not including 8,000 feet MSL.

Time of use. 0000 to 1000 local time, May 15, 1978, through May 17, 1978.

Controlling agency. FAA, San Juan ARTC Center.

Using agency. United States Atlantic Command, Norfolk, Va.

6. R-7105F—PONCE, P.R.

Boundaries. Beginning at Lat. 18°05'00" N., Long. 67°15'00" W.; to Lat. 18°05'00" N., Long. 66°45'00" W.; to Lat. 17°55'00" N., Long. 66°45'00" W.; thence west 3 NM from and parallel to the shoreline to point of beginning.

Altitudes. 8,000 feet MSL to FL 280.

Time of use. Continuous, May 10, 1978, through May 23, 1978.

Controlling agency. FAA, San Juan ARTC Center.

Using agency. United States Atlantic Command, Norfolk, Va.

Following is the proposed description of temporary Warning Area W-372. This is included herein for information purposes only, since its establishment would be processed through nonrulemaking procedures.

W-372—PONCE, P.R.

Boundaries. Beginning at Lat. 17°56'30" N., Long. 66°30'00" W.; thence east, 3 NM from and parallel to the shoreline to Lat. 17°55'30" N., Long. 65°56'30" W.; to Lat. 17°50'00" N., Long. 65°56'30" W.; to Lat. 17°50'00" N., Long. 66°17'00" W.; to Lat. 17°46'15" N., Long. 66°18'30" W.; to Lat. 17°47'50" N., Long. 66°23'00" W.; to Lat. 17°47'00" N., Long. 66°23'00" W.; to Lat. 17°48'00" N., Long. 66°30'00" W.; thence to point of beginning.

Altitudes. Surface to FL 250.

Time of use. Continuous, May 10-23, 1978.

Controlling agency. FAA, San Juan ARTC Center.

Using agency. United States Atlantic Command, Norfolk, Va.

The Commander in Chief, Atlantic (CINCLANT) will serve as the lead agency for the purpose of compliance with National Environmental Protection Act (NEPA).

Address comments concerning environmental aspects to:

Captain E. G. Smith, USN, CINCLANT N-37, Norfolk, Va. 23511; phone 804-444-6575.

Address comments concerning land use aspects to:

Mr. Robert R. Stafford, Jr., Jacksonville District Corps of Engineers, P.O. Box 4970, Jacksonville, Fla. 32201. Phone, 904-791-3725/3727.

(Secs. 307(a) and 313(a), Federal Aviation Act of 1958 (49 U.S.C. 1348(a) and 1354(a)); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); and 14 CFR 11.65)

NOTE.—The FAA has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821, as amended by Executive Order 11949, and OMB Circular A-107.

Issued in Washington, D.C., on December 9, 1977.

EDWARD J. MALO,
Acting Chief, Airspace and
Air Traffic Rules Division.

[FR Doc. 77-35643 Filed 12-14-77; 8:45 am]

[6355-01]

CONSUMER PRODUCT SAFETY COMMISSION

[16 CFR Parts 1120 and 1145]

CONSUMER PRODUCT SAFETY COMPLAINTS

Proposed Recordkeeping Rules; Extension of Comment Period

AGENCY: Consumer Product Safety Commission.

ACTION: Extension of comment period.

SUMMARY: In this document, the Commission extends from December 19, 1977 to January 18, 1978, the time during which comments may be submitted on its proposed recordkeeping rules for consumer product safety complaints under section 16(b) of the Consumer Product Safety Act. The Commission is taking this action pursuant to a request from a trade association that may be unable to submit comments within the time originally allotted. The Commission is also simultaneously extending the comment period for the proposed rule finding it to be in the public interest to apply this record retention requirement to products regulated under the Flammable Fabrics Act, the Federal Hazardous Substances Act and the Poison Prevention Packaging Act of 1970.

DATE: Comments on the proposed rules should be received by January 18, 1978.

ADDRESS: Comments should be sent to: Office of the Secretary, Consumer Products Safety Commission, 1111 18th Street NW., Washington, D.C. 20207.

FOR FURTHER INFORMATION CONTACT:

Mana L. Jennings, Product Defect Correction Division, Consumer Product Safety Commission, Washington, D.C. 20207, 301-492-6608.

SUPPLEMENTARY INFORMATION: In the FEDERAL REGISTER of November 3, 1977 (42 FR 57642), the Commission published proposed rules requiring consumer product safety complaints be retained for three years. This requirement, if issued as a final rule, would apply to products subject to the Commission's jurisdiction under the Consumer Product Safety Act (15 U.S.C. 2051 et seq.), the Refrigerator Safety Act of 1956 (15 U.S.C. 1211 et seq.), and the other three acts the Commission administers. The Commission also proposed a rule pursuant to section 30(d) of the Consumer Product Safety Act, as amended (15 U.S.C. 2079(d)) determining it to be in the public interest to make the same record retention requirement applicable to the products regulated under the other three acts: the Flammable Fabrics Act (15 U.S.C. 1191, et seq.), the Federal Hazardous Substances Act (15 U.S.C. 1261, et seq.) and the Poison Prevention Packaging Act of 1970 (15 U.S.C. 1471, et seq.).

Public comments were solicited on both proposed rules for 45 days, until December 19, 1977. The Commission has received a request from a trade association to extend the comment period for an additional 60 days. In the interest of promoting broad public comment on the rules, the Commission has decided to partially grant the request and extend the comment period for 30 days until January 18, 1978. The Commission believes that the additional 30 days, when taken with the original 45 days comment period, provides an ample period of time for the submission of comments without creating an unreasonable delay in the promulgation of rules that promote public safety.

Therefore, interested persons may submit written comments on the proposed rules until January 18, 1978. Comments received after that date will be considered to the extent practicable. Comments and any accompanying data or material should be submitted preferably in 5 copies to the Office of the Secretary, Consumer Product Safety Commission, Washington, D.C. 20207. Comments may be accompanied by a supporting brief. Comments and accompanying data may be seen in the Office of the Secretary, 1111 18th Street NW., Third Floor, Washington, D.C.

Dated: December 12, 1977.

RICHARD E. RAPPS,
Secretary, Consumer
Product Safety Commission.

[FR Doc. 77-35789 Filed 12-14-77; 8:45 am]

[4810-22]

DEPARTMENT OF THE TREASURY

Customs Service

[19 CFR Part 101]

GENERAL PROVISIONS

Withdrawal of Notice of Proposal To Extend the Customs Port Limits of Port Huron, Mich.

AGENCY: United States Customs Service, Department of the Treasury.

ACTION: Withdrawal of proposed rule.

SUMMARY: This document withdraws a notice of a proposal to extend the Customs port limits of Port Huron, Michigan. In light of a current reorganization study, it has been determined that it would not be in the best interests of the public or Customs to proceed with the proposal at this time.

EFFECTIVE DATE: December 15, 1977.

FOR FURTHER INFORMATION CONTACT:

Robert Schenarts, Inspection and Control Division, U.S. Customs Service, 1301 Constitution Avenue, NW., Washington, D.C. 20229, 202-566-8151.

SUPPLEMENTARY INFORMATION:

BACKGROUND

On October 10, 1975, the Customs Service published a notice in the FEDERAL REGISTER (40 FR 47795) proposing to extend the port limits of Port Huron, Michigan, in the Detroit, Michigan, Customs district (Region IX) to include the territory within the city limits of Port Huron and the municipalities of Marysville, St. Clair, Marine City, and Algonac, Michigan; the territory within the townships of Fort Gratiot, Port Huron, Kimball, and St. Clair, Michigan; and that territory within the townships of East China, Cottrellville, and Clay, Michigan, which lies between Michigan State Highway 29 and the west bank of the St. Clair River, all in St. Clair County, Michigan.

Interested persons were given until November 10, 1975, to submit relevant data, views, or arguments pertaining to the proposed extension.

DISCUSSION OF COMMENTS

A number of comments were received in response to the proposal, all but one of which were opposed to extending the port limits of Port Huron, Michigan. The principal objection is that the extension would cause the rotation of Customs Officers now permanently assigned to Customs stations within the port. It is claimed that the rotation may result in inefficiency and increased fuel consumption while not increasing service to the public.

It is the position of the Customs Service that the rotation of Customs officers to other areas within the limits of the port would allow for a more effective and efficient assignment of personnel, thereby increasing service to the public. The possible increased fuel consumption is con-

sidered to be negligible. However, in light of a current reorganization study, the Customs Service has determined that it would not be in the best interests of the public or Customs to proceed with the extension at this time.

Accordingly, the notice of proposal to extend the Customs port limits of Port Huron, Michigan, published in the FEDERAL REGISTER on October 10, 1975 (40 FR 47795), is withdrawn.

DRAFTING INFORMATION

The principal author of this document was Norman W. King, Attorney, Regulations and Legal Publications Division of the Office of Regulations and Rulings, U.S. Customs Service. However, personnel from other offices of the Customs Service participated in its development, both on matters of substance and style.

Dated: December 6, 1977.

BETTE B. ANDERSON,

Under Secretary of the Treasury.

[FR Doc. 77-35767 Filed 12-14-77; 8:45 am]

[1505-01]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Parts 51 and 52]

[FRL 827-6]

PREVENTION OF SIGNIFICANT DETERIORATION

Proposed Rulemaking; Modification and Supplemental Information

Correction

In FR Doc 77-35126 appearing at page 62020 in the issue of Thursday, December 8, 1977, the heading should appear as set forth above. On page 62021, first column, paragraph (41) should be corrected to read as follows:

(41) in section 163(a) strike out "165(d) (2) (C) (iv)" and insert in lieu thereof "section 165(d) (2) (C) (iv)";

[6712-01]

FEDERAL COMMUNICATIONS COMMISSION

[47 CFR Part 2]

[Docket No. 21371]

EQUIPMENT AUTHORIZATION PROGRAM Order Extending Time for Filing Comments and Reply Comments

AGENCY: Federal Communications Commission.

ACTION: Extension of time.

SUMMARY: An extension of time to file comments and reply comments has been requested in Docket No. 21371. Because of the pendency of a petition to withdraw the rulemaking, the Commission has granted the extension. No objections have been received.

DATES: Comments must be received by February 28, 1978 and Reply Comments must be received by March 18, 1978.

ADDRESSES: Federal Communications Commission, Washington, D.C. 20554.

FOR FURTHER INFORMATION CONTACT:

Leslie A. Wall, RF Devices & Experimental Branch, Office of Chief Engineer, 202-632-7095.

FURTHER ORDER EXTENDING TIME TO FILE COMMENTS

Adopted: December 6, 1977.

Released: December 9, 1977.

In the matter of amendment of Part 2 to require a description of measurement facilities used in the equipment authorization program and to make other changes, Docket No. 21371.

1. On September 6, 1977, the Commission released a Notice of Proposed Rulemaking in the above entitled matter.¹ The Consumer Electronics Group of the Electronic Industries Association requested a 60-day extension of time within which to file comments in this matter. This request was granted, extending to December 12, 1977 and December 22, 1977, the time within which to file comments and reply comments, respectively.

2. On November 9, 1977, the Communications Division and the Consumer Electronics Group of Electronics Industries Association filed a "Petition for Withdrawal of Proposed Rulemaking and Issuance of Inquiry." This petition is pending. In comments supporting the petition the Computer and Business Equipment Manufacturers Association has asked the Commission to again extend the time for filing comments.

3. Since a number of those wishing to comment have been awaiting Commission action on the petition to withdraw, before filing comments, the time for filing will be extended.

4. In view of the above, an extension of time to February 28, 1978, for filing of Comments and March 28, 1978, for filing of Reply Comments is ordered pursuant to the authority granted by § 0.241(d) of the Commission's rules.

RAYMOND E. SPENCE,
Chief Engineer.

[FR Doc. 77-35783 Filed 12-14-77; 8:45 am]

[4910-59]

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[49 CFR Parts 523, 533]

[Docket No. FE-77-05; Notice 1]

NONPASSENGER AUTOMOBILE AVERAGE FUEL ECONOMY STANDARDS MODEL YEARS 1980-81

Vehicle Classification; Proposed Rulemaking and Public Hearing and Invitation of Applications for Financial Assistance

AGENCY: National Highway Traffic Safety Administration, Department of Transportation.

¹ See 42 FR 54577, October 7, 1977.

ACTION: Notice of proposed rulemaking and public hearing and Invitation of Financial Assistance Applications.

SUMMARY: This notice proposes the establishment of average fuel economy standards for nonpassenger automobiles ("NPA's") manufactured in model years 1980 and 1981 and announces a public hearing on this proposal. This notice also proposes extending the NPA category to include vehicles with gross vehicle weight ratings as high as 8,500 pounds and limiting the extent to which "captive import" vehicles may be counted together with domestic vehicles for standards compliance purposes. Vehicles thereby included in the NPA category for the first time would be subject to fuel economy labeling requirements beginning with the 1979 model year. This notice also invites applications for financial assistance from individuals or organizations which can effectively supplement the record of this proceeding but which are financially unable to participate without assistance.

The issuance of these standards is required by section 502(b) of the Motor Vehicle Information and Cost Savings Act, as amended. These standards are intended to result in the consumption of approximately 12 billion fewer gallons of gasoline over the life of the NPA fleets manufactured in these two years, than would be the case if the average fuel economy of those vehicles remained at the anticipated 1979 level.

DATES: Comments on this notice must be received on or before January 30, 1978.

Applications for financial assistance must be received on or before January 3, 1978.

These standards are proposed to be effective for the 1980 and 1981 model years.

The public hearing will commence at 8:30 a.m. on Monday, January 16, 1978.

ADDRESSES: Comments must be submitted (preferably in ten copies) in writing to: Docket Section, National Highway Traffic Safety Administration, room 5108, 400 Seventh Street SW., Washington, D.C. 20590.

Submissions containing information for which confidential treatment is requested should be submitted (preferably in three copies) to: Chief Counsel, National Highway Traffic Safety Administration, room 5219, 400 Seventh Street SW., Washington, D.C. 20590, and seven additional copies from which the purportedly confidential information has been deleted should be sent to the Docket Section.

Applications for financial assistance should be submitted to Ms. Jeanette Feldman, Special Assistant to the Evaluation Board, National Highway Traffic Safety Administration, room 5220, 400 Seventh Street SW., Washington, D.C. 20590.

The public hearing will be held in the Federal Aviation Administration Auditorium, room 310, 800 Independence Avenue SW., Washington, D.C. Copies of statements for the hearing should be submitted to the individual listed below as the "Information Contact."

FOR FURTHER INFORMATION CONTACT:

Mr. George L. Parker, Office of Automotive Fuel Economy, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, D.C. 20590, 202-472-6902.

SUPPLEMENTARY INFORMATION:

I. BACKGROUND INFORMATION

Section 502(b) of the Motor Vehicle Information and Cost Savings Act, as amended (hereafter, "the Act"), requires the Secretary of Transportation to establish average fuel economy standards for nonpassenger automobiles (hereafter, "NPA's"). Authority to establish these fuel economy standards was delegated by the Secretary to the Administrator of the National Highway Traffic Safety Administration (NHTSA) in 41 FR 25015, June 22, 1976. These standards must be established for each model year beginning with 1979 and must be prescribed at least eighteen months prior to the start of the model year to which the standard applies. On March 14, 1977, average fuel economy standards for NPA's manufactured in model year 1979 were published in 42 FR 13807. This notice proposes the establishment of standards for NPA's manufactured in model years 1980 and 1981.

Before the issuance of this notice, NHTSA sent questionnaires and then special orders to the NPA manufacturers asking them specific questions relating to their current NPA's, their plans for future changes to those vehicles, and their capabilities to make other vehicle improvements. Copies of these questions and of the manufacturers' responses are available for inspection in the NHTSA Docket Section, at the address listed at the start of this notice. Responses to those questions provided much of the data upon which these standards are based.

The term "nonpassenger automobile" generally refers to vehicles in the "light truck" category, such as pickup trucks, vans, and utility vehicles like the American Motors Jeep CJ-5 and CJ-7. To be considered a NPA, a vehicle must first fall within the statutory definition of "automobile." Section 501(1) of the Act defines "automobile" as follows:

any 4-wheeled vehicle propelled by fuel which is manufactured primarily for use on public streets, roads, and highways (except any vehicle operated exclusively on a rail or rails), and

(A) which is rated at 6,000 lbs. gross vehicle weight or less, or

(B) which—
(i) is rated at more than 6,000 lbs. gross vehicle weight but less than 10,000 lbs. gross vehicle weight,

(ii) is a type of vehicle for which the Secretary determines, by rule, average fuel economy standards under this part are feasible, and

(iii) is a type of vehicle for which the Secretary determines, by rule, average fuel economy standards will result in significant energy conservation, or is a type of vehicle which the Secretary determines is substantially used for the same purposes as vehicles

described in subparagraph (A) of this paragraph.

The "automobile" category is divided into two subcategories, "passenger automobiles" and a residual category which the Department of Transportation (hereafter, "DOT") has labelled as NPA's. "Passenger automobiles" are defined in section 501(2) to be "any automobile (other than an automobile capable of off-highway operation) which the Secretary determines by rule is manufactured primarily for use in the transportation of not more than 10 individuals." Further discussion of which vehicles fall in these categories is contained in 49 CFR Part 523, originally published in 42 FR 38362, July 28, 1977.

Compliance with average fuel economy standards is determined in accordance with procedures established by the Environmental Protection Agency (EPA) under section 503 of the Act in 40 CFR Part 600. These procedures specify how test vehicles are selected, how the fuel economy of those vehicles is measured, and how the data are used to calculate mileage estimates for the EPA/Department of Energy mileage guides, fuel economy labeling, and fuel economy standards compliance. Testing is performed in a laboratory under controlled conditions. Under the law, NHTSA is responsible for determining which vehicles are subject to fuel economy standards and the level of those standards. EPA calculates a fuel economy average for each class of NPA manufactured by a manufacturer, and NHTSA compares that value to the standard for compliance purposes. Thus, individual NPA models need not comply with the fuel economy standard, but the fuel economy fleet average for all models on a production-weighted basis must meet or exceed the standard.

In cases of noncompliance with a standard, civil penalties are assessed at the rate of \$5 for each tenth of a mile per gallon by which a manufacturer's average falls short of the standard, multiplied by the total number of NPA's subject to the standard. If a manufacturer exceeds an applicable fuel economy standard in one model year, monetary credits are earned at the same rate and are deducted first from civil penalties incurred in the immediately preceding model year and then from the year immediately following the current year. Thus, noncompliance by a manufacturer in a single model year would not necessarily result in payment of civil penalties if the manufacturer sufficiently exceeds the standards in the prior or subsequent model year.

The fuel economy standards proposed in this notice are based upon projections of significant initiatives by the manufacturers over the next three years. However, the initiatives projected to be undertaken by 1980-81 in every case represent items either currently in use by some manufacturer, planned for use by 1980, or clearly demonstrated to be feasible by that time frame. Nor are essential attributes of NPA's such as initial price and

utility projected to change substantially as a result of this proposal. In general, NHTSA has concluded that NPA's can become more efficient by 1980-81 and achieve significant operating cost reductions through reasonable improvement efforts by the manufacturers.

II. SCOPE OF THE STANDARD

The NPA standard for model year 1979 is limited in applicability to vehicles with a gross vehicle weight rating (GVWR) of 6,000 pounds or less. (GVWR is a measure of a vehicle's weight when loaded to rated capacity. Thus, the average curb weight (unloaded) of all NPA's with GVWR's as high as 8500 pounds roughly approximates the average curb weight of large passenger cars, although their payload capacities differ greatly.) Separate standards are provided for "four-wheel-drive general utility vehicles" (vehicles such as the AM Jeep CJ series and the Toyota Land Cruiser) and all other NPA's. These standards are 15.8 and 17.2 mpg respectively, with each manufacturer being given the option of combining all of its NPA's and complying with the 17.2 mpg standard. All NPA's are treated identically and counted together for purposes of determining compliance with the 1979 standard regardless of whether they are domestically produced or are imported by a manufacturer. This notice proposes to change both the GVWR limitation and the treatment of imported NPA's beginning with model year 1980, as explained below.

(a) *The gross vehicle weight limitation.* Section 501 requires the Secretary of Transportation to make certain findings before he can subject vehicles with GVWR's between 6,000 and 10,000 pounds to fuel economy standards. As noted in Section I of this notice, the required findings are (1) that the vehicle is of a type for which average fuel economy standards are feasible, and (2) either that significant energy savings would result from the imposition of standards or that the vehicle is "substantially used for the same purposes as vehicles" with GVWR's of 6,000 pounds or less which are already subject to standards.

The 1979 NPA standard does not apply to vehicles with a GVWR of more than 6,000 pounds primarily because, when it was developing that standard in 1976, the NHTSA lacked a reliable source of fuel economy data for those vehicles to determine compliance with standards. EPA, which has in the past derived fuel economy data from vehicle emission test results, had not completed its rulemaking to require emission testing of trucks with GVWR's over 6,000 pounds by the time NHTSA initiated its 1979 NPA rulemaking. Most vehicles which potentially could be classified as NPA's fall within the EPA "light duty truck" category, which excludes vehicles with GVWR's above 6,000 pounds. Heavier trucks are not currently tested for emissions in a manner which yields fuel economy data. Now that EPA's rulemaking for the heavier vehicles is complete, it is clear that, beginning with the 1979 model

year, EPA's light truck category will include vehicles with GVWR's up to 8,500 pounds, curb weights of 6,000 pounds or less, and frontal areas of 46 square feet or less. As a result of this change, fuel economy data for these heavier vehicles will be available for the 1979 model year.

EPA's testing of light trucks with GVWR's up to 8,500 pounds for emissions will provide urban driving cycle fuel economy for those vehicles. Conducting an additional highway driving cycle test for those vehicles will provide a source of reliable fuel economy data which can be used in the future to determine compliance with fuel economy standards. Completion of EPA's rulemaking provides the crucial missing ingredient which prevented the inclusion of those vehicles at the time the 1979 standard was proposed. Thus, because of the assured existence of a test procedure to provide fuel economy data, fuel economy standards are feasible for those vehicles to be tested by EPA for the first time for the 1979 model year, which have GVWR's between 6,000 and 8,500 pounds, curb weights of 6,000 pounds or less, and vehicle frontal areas of 46 square feet or less (called "potential-NPA's").

Significant energy conservation would result from the establishment of fuel economy standards for this class of vehicles. For the 1977 model year, sales in the 6,001-8,500 pound GVWR category will exceed 1½ million units, a total which is twice as great as the number of NPA's currently sold in the 0-6,000 pound class. A 10 percent improvement in the fuel economy of those vehicles could save approximately 1.4 billion gallons per year of gasoline over the lifetime of one model year's production, a savings closely approximating that resulting from the imposition of the 1979 NPA standard. This would clearly be a significant energy savings. As shown in section IV of this notice, a 10 percent improvement is feasible for those vehicles.

It also appears that the vehicles in the 6,001 to 8,500 pound class are used for substantially the same purposes as the 6,000 pound and under vehicles. Some of the over-6,000 pound vehicles are merely re-rated or slightly modified versions of pickup trucks, vans, and utilities previously rated under 6,001 pounds. The body configurations of the 6,001-8,500 pounds GVWR fleet are generally the same as for the under 6,001 pounds GVWR fleet, and the vehicles are generally advertised for the same uses, particularly those vehicles in the 6,001-6,400 pound range. Data in the 1972 "Census of Transportation, Truck Inventory and Use Survey" and information gathered by the EPA in developing its light truck emission standards for 1979 indicate that at GVWR's below 8,000 pounds, a truck's major use is personal (i.e., non-commercial) transportation, that between 8,000 and 10,000 pounds GVWR a mixture of personal and commercial uses occur, and that above 10,000 pounds GVWR commercial uses predominate. The degree of personal transportation usage for

trucks under 8,500 pounds GVWR, appears to still be increasing, particularly for those under 6,400 pounds GVWR. Therefore, it is concluded that vehicles in the 6,001 to 8,500 pound class are "substantially used for the same purposes as vehicles" in the lower GVWR class. It should also be noted that the EPA made a similar finding on the question of vehicle usage patterns of trucks with GVWR's below 8,500 pounds when that agency extended the applicability of its light duty truck emission standards. See 41 FR 56316, December 28, 1976.

In view of the conclusions drawn above with respect to the feasibility of standards, fuel savings potential and vehicle use patterns; it is proposed to extend the statutory "automobile" category to include 4-wheeled vehicles propelled by fuel, manufactured primarily for use on public streets, roads, and highways, and which have a curb weight of 6,000 pounds or less, a frontal area of 46 square feet or less, and a GVWR of 6,001 to 8,500 pounds. The curb weight and frontal area limitations are imposed to make the fuel economy classification consistent with that adopted by EPA for emissions purposes. EPA concluded in its December 28, 1976, rulemaking that vehicles which exceed those limitations are not used for the same type of service as those with smaller frontal areas and curb weights, and that the EPA test driving cycle may be inappropriate for the larger vehicles. However, manufacturers may certify for emissions purposes NPA's up to 10,000 pounds GVWR, if they desire.

It is proposed that this expansion of the NPA category be effective beginning with the 1980 model year for standards compliance purposes. However, those vehicle would be subject to the requirements of section 506 of the Act, including the requirements that they have a fuel economy label affixed and that fuel economy data be included in the EPA/Department of Energy gas mileage guide, beginning with the 1979 model year. Fuel economy data for the 6,001-8,500 pound GVWR class could be obtained for the 1979 model year at the earliest, because EPA will not begin testing those vehicles for emissions until model year 1979. However, subjecting these vehicles to fuel economy standards for the 1979 model year would require an amendment to those standards, arguably making the standards more stringent and in violation of the "18-month rule" of section 502(f) of the Act. That provision requires that any amendment to a fuel economy standard which has the effect of making that standard more stringent must be promulgated at least 18 months prior to the start of the model year to which it applies. Those vehicles in the 6,000-8,500 pound class would not be required to be included in the manufacturers' NPA fleet averages for standards compliance purposes until the 1980 model year.

Further information relating to these determinations for vehicles in the 6,001-8,500 pound GVWR class is included in a document titled "Rulemaking Support

Paper for the 1980 and 1981 Nonpassenger Automobile Fuel Economy Standards." Copies of this document (hereafter called "the RSP") are available from the Office of Automotive Fuel Economy, at the address listed for information at the beginning of this notice.

(b) *Discretionary classification.* Section 502(b) of the Act authorized the establishment of "separate standards for different classes" of NPA's. The Act does not explicitly state the basis on which any classification scheme should be drawn. However, the report of the Conference Committee on the Act states that classes could be defined by the Secretary of Transportation, and "could be based on functional classifications or other factors." (S. Rept. No. 94-516, 94th Cong., 1st Sess. 155 (1975)). The Department interprets this language to grant wide latitude in selecting bases for classifying NPA's, as long as the classification scheme promotes the general purposes of the Act.

At the same time, the Department recognizes that substantial reasons exist for minimizing the number of classifications used in NPA standard-setting. First, minimizing the number of classifications is consistent with the paramount goal of energy conservation. The total fuel consumption of the NPA fleet is a function of the fleet's average fuel economy, the number of NPA's in operation, and the number of miles driven per vehicle. Only the first of these factors is subject to regulation under the Act. The simplest and most direct method for maximizing the NPA fleet average fuel economy is to set a single standard for all NPA's at the highest possible level. If multiple standards were created for different classes of NPA's, the Agency would create a situation where mix shifts could occur between these classes which could decrease average fuel economy. For example, establishing a separate standard for an inherently large and heavy type of NPA would permit unrestricted increases in the sale of that vehicle type. If these sales increases occurred as a result of shifts from more fuel efficient NPA types, then average fuel economy would be reduced, but the separate fuel economy standards could still be met.

Second, establishing multiple classifications would increase the administrative burden for both the government and the industry in determining standards compliance. Questions could arise as to the proper classification of particular vehicles, for example. Also, as the number of standards increases, the probability of encountering noncompliance by some manufacturer increases, thereby increasing the expected number of enforcement proceedings the agency would be required to conduct.

Third, minimizing the number of classes established would preserve the flexibility of the manufacturers in producing a product line which meets both the standards and market demand. As more constraints (such as additional class-standards) are placed on the

manufacturers' fleets, fewer options for complying with the standards remain. The added flexibility provided by fewer constraints would, for example, permit a manufacturer to do more than NHTSA projected to improve the fuel economy of some of its vehicles and little or nothing on others, instead of making the specific improvements projected by NHTSA for each of its vehicles. On the other hand, manufacturers with a limited product line of relatively fuel inefficient vehicles might be unable to comply with fuel economy standards based on the capabilities of manufacturers of a full line of vehicles with varying efficiencies, justifying the establishment of a separate classification and fuel economy standard for the former manufacturers. Based on these considerations, NHTSA is proposing separate standards for two- and four-wheel drive NPA's. See section VIII of this notice.

One purpose behind Title V of the Act is to encourage the domestic production of automobiles which are currently imported by the major domestic automobile companies, and thereby to protect employment in the U.S. automobile industry. With respect to passenger automobiles, section 503(b) of the Act provides that such "captive imports," which typically have relatively high fuel economy, may not be counted together with a manufacturer's domestic passenger automobiles for standards compliance purposes after model year 1979. Instead, the captive imports must comply separately as if manufactured by an independent entity. House Report No. 94-340 on H.R. 7014, from which Title V of the Act was derived, expresses the intent that a fuel economy calculation procedure similar to that used for passenger automobiles be used for NPA's. See p. 91, *supra*. Therefore, the NHTSA believes it would be appropriate to require the separate compliance of captive imports with NPA average fuel economy standards.

While the NHTSA believes that the separate treatment of "captive import" NPA's will promote the eventual domestic manufacture of these typically more fuel efficient vehicles, a number of possible schedules for implementing this requirement could be developed. The most direct approach for requiring separate compliance of the domestically manufactured and the captive import fleets would be to establish the earliest possible effective date for the requirement. Because of the decision not to impose such a requirement for the 1979 model year (see 42 FR 13810-13811) and the manufacturers' probable reliance on that decision in making their product plans, the earliest possible implementation date would be the 1980 model year. This effective date would encourage the earliest possible shift to domestic production of vehicles like the current captive imports, with corresponding increases in domestic automobile industry employment.

However, it may be desirable to implement the requirement gradually. Manufacturers may have irreversibly based their fuel economy improvement plans

for 1980 and 81 on the importation of highly fuel efficient foreign-manufactured NPA's and may have focused their resources in that area. A gradual implementation plan may also encourage expanded interest in and marketing of the smaller, more fuel efficient NPA's, especially in the case of those domestic manufacturers which have imported relatively low numbers of those vehicles in the past. If a strong demand for these vehicles can be fostered, the domestic manufacturers would have an additional incentive to continue and expand the sale of the vehicles after the time when the captive imports could not be used to improve fuel economy averages of domestic NPA fleets. An abrupt end to the inclusion of these smaller captive import NPA's could discourage those manufacturers which might otherwise venture into the small pick-up market from entering through the lowest risk method, importing vehicles. On the other hand, if fuel economy standards for 1980-81 are based on the assumption that captive imports will not be counted together with domestic NPA's, the resulting standards might provide a neutral environment in which sales of those imported vehicles could still expand if market forces so dictate, thus encouraging increased domestic production and jobs in later years. Subsequent standards would be based on the assumption of domestic production of compact pick-up trucks, which the agency projects can be introduced by the 1982 model year, thereby providing an incentive to increase sales of those vehicles.

An infinite number of possible implementation schemes exist for the separate calculation requirement. In the case of passenger automobiles, a two-year implementation period is provided, with the absolute number of imported vehicles which can be included in a manufacturer's domestic average in those years being limited to the lesser of the absolute number sold or the percentage of total sales of those captive imports in a 1974-5 base period. See section 503 (d) of the act. For NPA's, variations on the duration of the time allowed for full implementation, the "includable" number of imports, and the base period are all possible.

NHTSA is not proposing a single schedule for the implementation of a requirement for separate compliance determinations for the manufacturers' domestic and captive import fleets. Instead, the agency is putting forward two possible schedules. The first requires complete separation of domestic and captive import NPA's beginning with the 1980 model year with no gradual implementation period. The second alternative delays complete separation until 1982. Under this latter alternative, captive imports could be included in a manufacturer's domestic average up to 6 percent of total NPA sales for each class of NPA's in each of the two years. Commencing with the 1982 model year, no captive imports could be included in a manufacturer's domestic average; those imports would be required to

comply separately with the fuel economy standards, as if manufactured by a separate manufacturer. The 6 percent figure approximates the NPA captive import market penetration of Ford, which was the highest of all the domestic manufacturers in that year. Adopting the 6 percent limitation would permit all of the manufacturers to enter the small pick-up market without making a major resource commitment for tooling, i.e., through importing such vehicles, but would not permit any of the manufacturers to comply with the fuel economy standards for 1980-81 by merely importing large numbers of vehicles.

While the agency is focusing on these two alternatives, it should be realized that they are illustrative of the universe of possible resolutions of the captive import issue, which ranges from separate treatment beginning in 1980 to various gradual implementation schedules to continuation of the full inclusion of captive import NPA's in the domestic fuel economy averages. NHTSA requests comment on all issues relevant to the captive import question, including an appropriate effective date for the requirement, the impact on domestic employment of the two year delay in total exclusion of captive imports, and the extent to which such a delay would encourage domestic production of small NPA's. Additional discussion of these matters is contained in section V-D of the RSP.

Depending on the extent to which captive imports may be included in a manufacturer's domestic fuel economy average for compliance purposes, that manufacturer's maximum achievable domestic fuel economy level in 1980 and 1981 will vary. Therefore, two different sets of fuel economy standards have been proposed, based on the two alternative treatments of captive imports discussed above. However, it should be clearly understood that the fuel economy standards for model year 1982 and thereafter will be based in part on the projected sale by GM, Ford, and Chrysler of domestically manufactured compact pick-up trucks, regardless of the final resolution of the captive imports question. NHTSA has information which indicates that the domestic production of these vehicles by those companies appears to be feasible by 1982.

After consultation between NHTSA and EPA on the captive import issue, the EPA has expressed its intention to amend the NPA average fuel economy calculation procedures in 40 CFR Part 600 to provide for the separate treatment of captive imports in accordance with the results of this rulemaking proceeding.

III. STATUTORY CRITERIA

Section 502(b) of the act provides that average fuel economy standards for NPA's be set at a level which is the "maximum feasible average fuel economy level." Section 502(e) provides that in determining this level, the Secretary must consider four factors: Technological feasibility, economic practicability,

the effect of other Federal motor vehicle standards on fuel economy, and the need of the nation to conserve energy. These same considerations are relevant to the establishment of fuel economy standards for passenger automobiles under section 502(a) of the Act.

The Department's interpretation of these terms, as they relate to the automobile fuel economy standard-setting process, was discussed at length in the FEDERAL REGISTER notice which established the 1981-84 passenger automobile standards (42 FR 33534, June 30, 1977). To summarize that notice, "technological feasibility" means that consideration must be given to whether particular methods of improving fuel economy will be available for commercial application in the model year for which a standard is being established. This does not mean that the technology must be available or in use when a standard is proposed or issued. "Economic practicability" is interpreted to require a consideration of whether the implementation of projected fuel economy improvements is within the economic capability of the industry. "The effect of other Federal motor vehicle standards on fuel economy" requires an analysis of the unavoidable adverse effects on fuel economy of compliance with emission, safety, noise, or damageability standards. Thus, for example, this analysis projects the impact on fuel economy of the use by the manufacturers of the most fuel efficient emission control systems. Finally, "the need of the Nation to conserve energy" requires consideration of the consumer cost, national balance of payments, environmental, and foreign policy implications of our need for large quantities of petroleum, especially imported petroleum.

IV. TECHNOLOGICAL FEASIBILITY

(a) *Projection methodology.* Under the NHTSA methodology discussed above, the projection of technologically feasible fuel economy levels begins with the establishment of the current baseline of fuel economy values for the NPA fleet. A baseline of 1977 model year fuel economy ratings, with 1976 model year sales volumes (partially adjusted to reflect anticipated 1977 sales) was used. For NPA's of 6,000 pounds GVWR or less, fuel economy ratings were obtained from EPA emission certification and fuel economy labeling data. For vehicles between 6,001 and 8,500 pounds GVWR, which the agency proposes to classify as NPA's beginning with the 1980 model year for standards compliance purposes, data from the lower weight vehicles were extrapolated. More information on this process is contained in section VI of the RSP. The extrapolation takes into account vehicle weight, engine displacement, and final drive and transmission gear ratios, but does not reflect differences in such areas as engine efficiency and vehicle frontal area (which affects aerodynamic characteristics), which may affect fuel economy. Comment is requested on the appropriateness of the extrapolation procedure used and possible alternative methods for obtaining fuel

economy data for "potential-NPA's" in the 6,001-8,500 pound GVWR class.

Once the baseline fleet was established, the next step in projecting technologically feasible fuel economy levels was to apply the improvement techniques determined to be applicable to NPA's, based on currently available information. Because of differences in the nature and intended use of different types of NPA's, not every model type was projected to use the same technological improvement to the same extent. Instead, an assessment was made of the appropriateness of each potential application. The individual items of fuel economy improvement technology are basically the same as those considered for use in passenger and nonpassenger automobiles in past standard-setting proceedings, although not necessarily with the same implementation schedule or fuel economy benefit as was projected for passenger automobiles. The percent improvements for each item are weighted according to their maximum projected market penetration, then added to obtain the total percent improvement. The total percent improvement is then multiplied by the baseline fuel economy to obtain each manufacturer's maximum achievable fuel economy level based on currently available information. The items considered were the following: Weight reduction, transmission improvements (automatic and manual), improved lubricants, reduced accessory loads, improved aerodynamic characteristics, reduced tire rolling resistance, use of alternative engines such as the diesel and the stratified charge, reduced engine displacement and/or drive ratios (CID x N/V), use of turbochargers, engine efficiency improvements such as the use of electronic controls for various engine operating parameters and fuel injection, variable displacement engines, and shifting sales toward vehicles in lower weight classes (mix shifts). These items are discussed below individually.

(b) *Weight reduction.* For analytical purposes, the weight reduction category has been divided into two subcategories, vehicle redesign and material substitution. "Vehicle redesign" is the redesign of a vehicle for maximum cargo and passenger-carrying efficiency, reducing the exterior dimensions without significantly reducing the functional passenger and cargo space. The agency currently has little data on the extent to which this process could be applied to NPA's. However, there seems little doubt that some room for improved packaging exists. Also, the use of transversely mounted front-wheel drive power trains, currently nonexistent on domestically manufactured NPA's, could reduce engine compartment depth and could permit the redesign of passenger and cargo compartments to take advantage of the deletion of the drive shaft. By its very nature, vehicle redesign is an expensive process which in the past has occurred at intervals of five years or more. By accelerating the redesign process to the maximum extent

feasible, some current NPA's could be redesigned by the 1981 model year. At the same time, it must be recognized that not all NPA's of a single manufacturer could be expected to be redesigned in a brief time period, especially when most of the manufacturers are in the process of redesigning their passenger automobiles on an accelerated basis in order to improve the fuel economy of those vehicles. Therefore, it was projected that a limited number of vehicle redesigns could occur prior to model year 1982 both as part of historic model year change programs and of accelerated efforts to improve fuel economy, and that the manufacturers, aware of the need to improve the fuel economy of these vehicles since the passage of the Act in December 1975, could adopt fuel efficient designs.

As part of a major vehicle redesign or in some cases without a major redesign, the substitution of lighter weight vehicle components could occur. This fuel economy improvement technique involves the use of such materials as aluminum, plastics, high strength steel, and thinner glass, as well as the use of alternative design and casting techniques which permit the use of less material in components. Table VI-7 of the RSP sets forth a number of possible areas of material substitution which could be implemented in the 1980-81 time frame. Fleet average weight reductions of approximately 200 to over 300 pounds are achievable through the use of the listed material substitutions. NHTSA has recently received information from several plastics and aluminum suppliers which indicate this projection may be low. These submissions are in the public docket and comment is invited on their validity.

Combining the weight reductions achievable through vehicle redesign, material substitution, and the introduction of new NPA models (see Section IV(K) of this notice), the following fleet average inertia weights (in pounds) are projected to be achievable:

	4 x 2	4 x 4
Domestic production 1980		
AMC.....	2,924	3,801
Ford.....	4,129 *(4,039)	4,530 *(4,438)
GM.....	4,351 *(4,270)	5,000 *(4,880)
Chrysler.....	4,091 *(4,026)	4,697 *(4,595)
IH.....	4,159	4,358
Domestic production 1981		
AMC.....	2,799	3,748
Ford.....	4,139 *(4,071)	4,515 *(4,424)
GM.....	3,913 *(3,858)	4,808 *(4,700)
Chrysler.....	3,919 *(3,864)	4,509 *(4,418)
IH.....	4,114	4,263

*Fleet average including 6 pct captive imports.

The projected total weight reduction of approximately 400 pounds per vehicle results in an average fuel economy improvement of approximately 5 percent by 1981. The different inertia weights projected for the various manufacturers are due primarily to the current differences in the mix of products offered by those companies.

(c) *Transmission improvements.* Two levels of improvement to present automatic transmissions have been considered in the RSP. The first level involves relatively minor improvements to such transmissions, such as the use of more efficient torque converters. The second level requires a major redesign of the transmission, with the addition of a fourth forward gear ratio and a lock-up clutch on the torque converter. The first level of improvements could be implemented by the larger manufacturers for the 1980 model year, and the smaller manufacturers, which generally purchase transmissions from outside sources, could obtain them on a delayed basis of perhaps one year later. First level improvements are projected to obtain a 3.5 percent fuel economy improvement per vehicle. Second level improvements should gain a total improvement of 10 percent compared to the present base, but are not expected to be generally available for use in NPA's during the 1980 and 1981 model years. The four speed lock-up transmissions should first be available in the early 1980's for use in passenger automobiles, with availability for use in NAP's generally coming later. However, NHTSA projects that Ford, which appears to be the leader among the domestic manufacturers in building these transmissions, could apply some of those transmissions to NPA's and achieve a 15 percent penetration in its 2-wheel drive NPA fleet for model year 1980.

A 5 percent fuel economy improvement could result from changes in current manual transmissions, through the substitution of units with additional over-drive forward gears or by using wide ratio transmissions in conjunction with low numerical ratio rear axles. By the mid-1980's, greater usage of such units in the manual transmission portion of the fleet should be possible.

(d) *Improved lubricants and accessories.* The agency attributes a total improvement in fuel economy of 8 percent by model year 1981 to the use of improved lubricants and through the use of improved vehicle and engine pumps, fans, and accessory drives. See Section VI of the RSP. A 2 percent improvement is projected for accessories in model year 1980. In the same year, a 2 percent fuel economy improvement could be obtained through the use of lower viscosity engine lubricants. By 1981, a 1 percent benefit from the use of gearbox lubricants could be achieved and an additional 3 percent benefit (compared to the projected 1980 base) could be achieved through the use of recently developed synthetic engine lubricants. The use of these improved lubricants in fuel economy testing is subject to prior EPA approval. Thus, total improvements for lubricants and accessories of 4 percent by 1980 and 8 percent by 1981 could be achieved.

(e) *Improving NPA aerodynamic characteristics.* A vehicle's aerodynamic characteristics are largely a function of its frontal area and its aerodynamic drag coefficient. Major reductions of these two factors could be achieved only as

part of the body redesign process. As noted above, it is projected that some model types in the current NPA fleet could be redesigned by model year 1981. Changes in vehicle frontal area are limited by minimum acceptable levels of passenger and cargo carrying space. However, those precise levels are unclear. For example, the agency lacks data on what percent of NPA owners need the full cargo capacity of their vehicles and how frequently that need arises. Interested persons are urged to submit any data they have on this matter. Reductions in aerodynamic drag coefficients can also be achieved as part of a major vehicle redesign. Use of all of these methods for improving vehicle aerodynamic characteristics should make a fuel economy improvement of 4 percent feasible for those NPA's that could be redesigned by 1981. See RSP, Section VI.

(f) *Reducing vehicle rolling resistance.* Model year 1977 NPA's use bias ply tires almost exclusively. Two levels of tire improvement above current tires are feasible, resulting in significantly improved vehicle fuel economy. The first level of improvement is achievable through the use of currently available radial tires on all NPA's. Although the portion of the NPA fleet which currently uses tires rated for high inflation pressures would not show a major improvement in fuel economy from this change, virtually all vans and the majority of pickups could benefit from the use of radial tires.

The second level of improvement could result from the use of tires with lower rolling resistance than current radials. Since these tires achieve better vehicle fuel economy in part through high inflation pressure operation, the same limitations apply to their use as to radials. Present indications are that these advanced tires may not be available for use on NPA's by model year 1981. The fuel economy benefit from the use of radial tires is 5 percent, for the 90 percent of the NPA fleet which does not yet use those tires or 4.5 percent on a fleet wide basis. Manufacturers must use the optional EPA "coast-down" procedure to obtain credit for these tire improvements. Depending on how the vehicles' actual road load horsepower values compare to EPA's currently tabulated values, specific manufacturers could experience either greater or lesser benefits than the 4.5 percent projected.

(g) *Use of alternative engines.* The current fleet of domestic NPA's is powered almost exclusively by conventional spark ignition engines. As discussed in the final notice on 1981-84 passenger automobile fuel economy standards, diesel (compression ignition) or stratified charge (such as the Ford PROCO) engine concepts have the potential to improve fuel economy by 20-25 percent per vehicle. See 42 FR 33540. Some of the domestic manufacturers have indicated that they plan to begin implementation of diesel engines in their NPA's by the 1980 model year or earlier.

The agency is reluctant now as it was when it issued the 1981-84 notice to pro-

ject maximum use of diesel engines until questions about the health effects relating to particulate and other currently unregulated emissions from those engines are more clearly resolved. The EPA is investigating these questions, and information on any potential adverse health effects resulting from widespread use of these engines, and, if such adverse effects exist, the potential for control of those emissions, should be forthcoming. DOT is also conducting research into the fuel economy benefits of the use of these engines. In the meantime, the agency proposes to continue its policy of not basing fuel economy standards on the projected maximum use of diesel engines for model years 1980 and 1981. However, since several manufacturers have announced they plan to use this technology in the future, the projections of their future capabilities are based on that planned usage.

With respect to the usage of engines employing stratified charge concepts, it appears that the earliest feasible implementation date for that technology is after the 1980-81 period. Development work on the Ford PROCO engine, which has been characterized as a gasoline version of the diesel, should make that engine available for use slightly after that period, and other domestic manufacturers are also pursuing similar technology. The agency does not project the use of this technology for the 1980-81 period.

Comment is requested from all interested parties on the issue of use of alternative engines and on the questions of the existence of any adverse diesel-related health effects and the potential for control of diesel emissions in particular.

(h) *Reducing engine displacement or N/V ratio.* By using smaller displacement engines or by changing gearing to reduce the ratio of engine speed to vehicle speed (N/V), it is possible (within certain limits) to improve vehicle fuel economy. The main constraint limiting the extent of these reductions is that acceleration capabilities and the ability of a vehicle to pull loads up a steep grade are correspondingly reduced as engine displacement and gear ratios are diminished.

The major manufacturers of NPA's were requested to provide information on criteria by which performance levels could be judged, and on performance of current vehicles. The manufacturers indicated in their responses that 0-60 mile per hour acceleration, gradability, and engine swept volume in high gear per ton-mile, all determined at full load, are the most important criteria. The responses also indicated that current performance levels are substantially greater than the minima submitted by the manufacturers. Nevertheless, recognizing that some NPA applications may require performance levels above the minima, the agency considers that the maximum feasible reduction in the product of engine displacement and N/V ratio ($CID \times N/V$) is 10 percent for model years 1980 and 1981. Together with reductions in

CID×N/V made possible by weight reduction, this results in an improvement in average fuel economy of 6 percent in those two years. Further discussion of this topic is contained in section VI of the RSP.

It is possible to obtain further fuel economy improvements through even greater reductions in engine displacement or gear ratios combined with the use of turbochargers. Turbochargers increase the horsepower output of an engine in its upper operating speed range, while slightly increasing its fuel consumption. Thus, it may be possible to replace a current engine with a turbocharged version of a smaller displacement, lower weight engine, thereby maintaining the performance level of the large engine while approaching the fuel economy level of the smaller one.

Information currently available to the agency indicates that the net effect of a fuel economy improvement of approximately 10 percent is feasible through the approach described above. Manufacturers of turbochargers indicate that they could achieve large-scale production (in excess of 100,000 units per year) in the 1980-81 time frame if orders were received immediately from the automobile companies. The suppliers also indicate that the cost of turbochargers once these high production levels are achieved could drop to the range of \$65 to \$100. The benefits of the use of turbochargers are especially evident in the case of diesel powered vehicles, where reduction of smoke emissions and increased engine efficiency result from turbocharging.

However, the agency has a number of concerns which led it to propose standards which are not based on the projected use of turbochargers. The agency may, however, base the final standards on such use if its continuing analysis and information gathering resolve certain problems. First, in order to take full advantage of turbocharging and to reduce the likelihood of engine durability problems, engines should be initially designed to accommodate turbochargers. Also, to obtain maximum fuel economy improvements across a manufacturer's fleet, a major production shift toward smaller displacement engines would be required. Both of these changes may require more lead-time than is available by the 1980-81 model years. Pre-ignition problems also exist with turbocharged engines, and development work would be required to solve those problems. The agency is also concerned that manufacturers may be designing turbochargers to operate at very low levels over the EPA driving cycle, although the systems would operate at higher levels in the high engine speed modes the vehicles might experience on the road. Such designs may result in significant overstating of the dynamometer-generated fuel economy data. Comment is invited on each of the problems listed above and the prospects for resolving those problems by 1980-81.

(i) *Engine efficiency improvements.* A number of improvements can be made to existing spark ignition engines to im-

prove their efficiency. Among these improvements are the use of improved fuel metering such as fuel injection, redesigned and optimized combustion chambers, increased expansion ratio, reduced internal friction, intake system and valve timing optimization, knock sensing, and the use of full electronic controls for air-to-fuel ratio, spark advance, and exhaust gas recirculation. Much of this technology is expected to carry over from passenger automobile applications. Since the engines of each of the manufacturers do not perform at the same level of efficiency, different improvement potentials exist for the various manufacturers. The agency projects that by 1980 an 8 percent fuel economy improvement from these measures could be achieved by all manufacturers and an even greater improvement by AM. AM appears, on the basis of all fuel economy data available to NHTSA, to start from a lower engine efficiency baseline than the other manufacturers. Therefore, an 11 percent fuel economy improvement was projected for AM.

(j) *Variable displacement engine technology.* Variable displacement engine technology such as that produced by Eaton Corporation permits engines to function on a portion of their cylinders during light load operations. NHTSA projects that all manufacturers of 2-wheel drive NPA's could begin implementing the use of this technology in their NPA fleets during the 1980-81 period, and several manufacturers have indicated their intention to do so. Eaton's limited testing of the devices show a fuel economy benefit of 40 percent during idling and decelerating, 25 percent during low speed cruising, 15 percent during highway speed cruising, and 10 percent during light acceleration. During moderate to heavy acceleration, no benefit would result since the engine would be operating on all cylinders. Based on information submitted to the agency, a 10 percent improvement in fuel economy of 2-wheel drive vehicles is feasible, averaged over the EPA driving cycle. This technology should be available for use by the 1980 model year. Further development may make the variable displacement technology compatible with 4-wheel-drive vehicles, which are designed for more severe duty cycles. Comment is invited on the feasibility of applying this technology to 4-wheel-drive vehicles.

(k) *Mix shifts.* The term "mix shift" refers to the concept of increasing the proportion of a manufacturer's vehicles in the market classes which have high fuel economy relative to the other classes of vehicles. Because of the more limited number of "size" market classes for NPA's as compared to those for passenger automobiles, the immediate potential for improvement of NPA average fuel economy through mix shifts is less than that for passenger automobile average fuel economy by that means. The potential for NPA's could be increased through the creation of new market

classes of the various types of NPA's. Examples of these new classes are the small pick-up trucks imported in the past several years, and possible smaller versions of currently offered vans, standard pickups, and utility vehicles. A number of trade press articles have indicated that at least one of the manufacturers will offer mini-vans. As discussed in the preamble to the final rule establishing 1981-84 passenger automobile standards (42 FR 33542), the projection of maximum efforts by the manufacturers to shift the sales mix toward smaller classes is entirely consistent with the statutory requirement for establishing fuel economy standards at the "maximum feasible" level. Therefore, the NHTSA has attempted to determine the extent to which a shift in sales mix toward more fuel efficient market classes could occur, given maximum efforts by the manufacturers to stimulate such a shift.

A major limiting factor on any sales mix shift is the reduction in vehicle functional capabilities which could result from such a shift. In general, the smaller NPA's would be expected to have less cargo carrying capacity than the larger ones. However, the agency believes that a significant number of NPA owners purchase vehicles with much greater capacity than necessary for the commercial or other tasks which the vehicle is expected to perform. In fact, it appears that two-thirds of new light trucks sold in this country are used primarily for personal transportation, and these vehicles are driven unloaded or lightly loaded the majority of the time. See RSP. DOT is in the process of gathering additional data on these usage patterns.

In conjunction with the proposed separate treatment of captive import NPA's, the NHTSA projects that General Motors, Ford, and Chrysler could offer domestically manufactured small pick-up trucks comparable to those which they either currently import or are expected to begin importing in the near future. NHTSA also concludes that this domestic production of small pick-ups could begin by the 1982 model year if development were initiated immediately. Based on information currently available, NHTSA's future standard setting for NPA's manufactured in that model year and thereafter will be based on the projected domestic production of those vehicles.

With respect to other possible smaller NPA's e.g., mini vans, the NHTSA projects that the larger domestic manufacturers could begin offering new, smaller vehicles in newly created market classes in model year 1980. Section VI of the RSP discusses the new models projected to be feasible (such as compact vans) and the basis for those projections.

1. *The foreign manufacturers.* Although the discussion in the preceding paragraphs is directed primarily toward the capabilities of the domestic NPA manufacturers, the same methods of improving fuel economy are generally available to the foreign manufacturers. The major exception to this conclusion as to availability of means of improving fuel

economy involves the use of mix shifts. Some other means such as weight reduction and variable displacement engine technology may be available to these manufacturers to a lesser extent than for the domestic companies, due to the different natures of the vehicles produced.

NHTSA projected the fuel economy capability of foreign manufacturers based on the use of improved transmissions, radial tires (except for Volkswagen, which currently employs those tires), and improved engine and gearbox lubricants. These technological improvements were determined to result in an aggregate fuel economy improvement of 10.5 percent in 1980 and 14.5 percent in 1981. Although it is possible that other methods of improving fuel economy are available to the foreign manufacturers, it is unnecessary for NHTSA to determine the maximum capabilities of these manufacturers for this proceeding. Since these manufacturers account for a minority (i.e., approximately 10 percent) of domestic NPA sales, and since even a conservative projection of their fuel economy capabilities for 1980-81 places them well above the levels projected for the domestic manufacturers (see section VIII of this notice), NHTSA has determined that the foreign manufacturers' capabilities do not constrain the level at which fuel economy standards may be set. Setting the standards at a level which 90 percent of the market could not approach would clearly be contrary to the act.

V. ECONOMIC PRACTICABILITY

Although the above-discussed methods for improving fuel economy are all technologically feasible, a number of economic related factors limit the extent to which those methods can be implemented. Many of the methods for improving fuel economy are capital-intensive, necessitating a significant diversion of a manufacturer's investment resources. In addition, many other vehicle improvement programs compete for the limited funds available for fuel economy improvements, such as the need to improve emission control characteristics and the need to meet new safety standards. Further, most of the major manufacturers of NPA's also produce passenger automobiles, which are simultaneously undergoing financial resource-consuming changes as a result of fuel economy and other requirements. Therefore, NHTSA has made allowances, as discussed below, for the need of the manufacturers to gradually implement NPA technological improvements over a period of several years. The schedule would permit the manufacturers to take advantage in some cases of normal redesign cycles and reinvestment in plant and equipment where limited lead-time precludes major changes in plans. Because of the different financial capabilities of the various manufacturers, the maximum implementation rates for individual fuel economy improvement techniques will vary accordingly.

The implementation schedules for the domestic NPA manufacturers are set forth in Tables VI-1 through VI-5 of the RSP. In section VI of that document, the agency discusses the reasons for limiting the penetration rates to those specified, based on the differing financial capabilities of the manufacturers. In general, the agency determined that improvements to tires, accessories, lubricants, and spark ignition engine efficiency, could be fully implemented across the manufacturers' product lines in the 1980-81 period. Other items of technology were projected to be capable of being implemented at a slower rate, depending on whether the particular manufacturer possesses the capability to produce the items itself or whether it must purchase them from outside sources, and in some cases on technical considerations such as compatibility with other projected technology. For example, variable displacement engines were projected to achieve a 5 percent market penetration for 1980 and 11 percent by 1981. Alternative engines such as the diesel were projected to be used in accordance with NHTSA's best estimates of the manufacturers' plans, for the reasons discussed above. Weight reduction was based on projections of feasible redesigns and light-weight materials substitution for 1980-81. Projected redesigns were limited primarily to those planned by the manufacturers, because of the limited lead-time until the beginning of those model years, and the three to four years needed to develop a new NPA line, from design to assembly. Reductions in engine displacement and drive ratios were projected to be implemented by the 1980 model year.

Once an overall implementation plan for each manufacturer was developed, the economic impact of all the projected improvements was evaluated. This evaluation, conducted in accordance with Executive Order 11821, as amended by E.O. 11949, and related Department procedures, is presented in a document titled "Preliminary Impact Assessment of the Fuel Economy Standards for Model Year 1980-81 Nonpassenger Automobiles," copies of which are in the public docket. The agency concluded in this analysis that relatively modest capital expenditures would be necessary for GM, Ford, and Chrysler to implement the changes to their NPA fleets discussed above, while AM would be required to invest at a greater rate. On the average, the required investment would be less than 20 percent of that estimated to occur normally for North American NPA production for the domestic companies. The larger companies could obtain this capital from retained earnings, with the smaller ones perhaps being required to go to outside sources.

The projected capital investment, together with the increased variable cost of certain items of technology determined to be feasible for use in 1980-81, are likely to result in increased new vehicle prices for purchasers of new NPA's in those years. However, these price in-

creases would be under \$160 per vehicle and would be more than offset by fuel savings over the life of the vehicle, as a result of the higher fuel efficiency. These price increases are not expected to have a measurable impact on industry sales or employment.

Further information on the economic impact of the proposed standards are contained in section VIII of the RSP and in the preliminary economic impact assessment.

VI. THE EFFECT OF OTHER FEDERAL STANDARDS

The one category of Federal motor vehicle standards certain to increase in stringency over current levels by 1980-81 is exhaust emission standard category. Since the results of EPA's classifications of vehicles as "light duty vehicles" and "light duty trucks" for emission purposes are not completely identical to the results of classifications by this agency for fuel economy purposes, it is necessary to assess the impact of changes to emission standards for both EPA vehicle classes. With the proposed extension of the NPA class to include vehicles with GVWR's up to 8,500 pounds, all members of the expanded NPA class will also be light duty trucks with the exception of such passenger car derivatives as the Ford Ranchero and the Chevrolet El Camino. The latter vehicles are subject to light duty vehicle emission standards.

The agency has determined that the light duty vehicle emission standards for 1981-84 need not necessarily cause a fuel economy penalty. (See 42 FR 33546-7.) The determination of no fuel economy penalty with respect to these vehicles was made assuming emission standards of 0.41 gram-per mile (gpm) of hydrocarbons (HC), 3.4 gpm for carbon monoxide (CO), and 1.0 gpm for oxides of nitrogen (NOx). However, the vast majority of NPA's in 1980-81 will be subject to light duty truck emission standards of 1.7 gpm HC, 18.0 gpm CO, and 2.3 gpm for NOx, which are substantially less stringent than the passenger car standards. Current light duty truck standards are 2.0 HC/20 CO/3.1 NOx.

The NPA manufacturers have not generally employed the most advanced emission control techniques to comply with current light duty truck emission standards. Examples of technology which should be available for use by 1980 and which should permit the attainment of the more stringent light duty truck emission standards with negligible adverse fuel economy impact are proportional exhaust gas recirculation, larger oxidation catalysts, and the electronic control units discussed in section IV(1) of this preamble, if needed. The NHTSA has concluded that, through the use of this and other advanced technology, no fuel economy penalty need result from the more stringent emission requirements. NHTSA previously drew the same conclusion in the 1979 NPA standard rulemaking proceeding. See 42 FR 13813-4, March 4, 1977. However, NHTSA projects that the need for vehicles in the 6,001-8,500 pound

GVWR class to employ emission controls beginning in 1979 may result in some added weight.

New standards in the areas of vehicle noise, damageability, and occupant safety may be imposed in the future. However, the NHTSA cannot now predict with any degree of certainty whether these standards will apply to 1980 or 1981 year NPA's, and, if so, at what levels the standards will be established, which techniques will be available for compliance, and what fuel economy impact would result. Therefore, no allowance is proposed to be made for these other categories of standards. If new or more stringent standards are issued in those categories after the completion of this rulemaking proceeding and some allowance for a fuel economy impact by these standards appears justified, the NHTSA would exercise its authority under section 502(f) of the act to amend the fuel economy standards to take into account those impacts.

One adjustment is necessary, however, to account for a change in the EPA test procedures used for both emission and fuel economy compliance purposes. This adjustment, discussed in the preamble to the final rule establishing 1979 NPA fuel economy standards (42 FR 13814), is necessary to account for increases in the required road-load horsepower dynamometer settings used for testing. An 8 percent reduction in fuel economy was projected in that document and the NHTSA proposes to continue to use that adjustment, since the reference fuel economy data used in these fuel economy projections were measured using 1977 test procedures.

VII. THE NEED OF THE NATION TO CONSERVE ENERGY

Section III of the RSP contains a discussion of the need for energy conservation and the potential to reduce consumption. All available data indicate that the national need to reduce petroleum consumption is very great. A major reason for this need is that the importation of large quantities of petroleum creates serious balance of payments and foreign policy problems. The United States currently spends approximately \$45 billion annually for imported petroleum. But for this large expenditure, the current large U.S. trade deficit would be a surplus. The fact that approximately half of all petroleum consumed in this country is imported demonstrates our vulnerability to a supply interruption, as occurred in 1973. The proposed NPA fuel economy standards themselves will clearly not solve these problems. However, in the context of an overall national conservation effort, it is clear that every available source of energy-saving potential must be considered, and, if practicable, exploited if the overall problem is to be solved.

The impact of NPA fuel economy standards on fuel consumption is itself significant. NPA sales have been growing at a rate approximately four times faster

than that for passenger automobiles over the past several years. By 1980, NPA sales could reach a level of one-third that projected for passenger automobiles, and by 1985, the on-the-road fleet of NPA's is projected to double. If no improvements in NPA fuel economy were made beyond the levels established in the 1979 standards, NPA fuel consumption could reach a level of 90 percent of that projected for passenger automobiles by 1990. Therefore, this consideration in establishing the "maximum feasible average fuel economy level" militates in favor of establishing fuel economy standards at stringent levels.

VIII. SETTING THE PROPOSED STANDARD

The procedure for determining the "maximum feasible average fuel economy level" and thereby the average fuel economy standard, is discussed in the 1981-84 passenger automobile standards final rule, at 42 FR 33547-9. Under that procedure, the NHTSA first determines the maximum achievable level for each manufacturer, considering the four factors discussed above. This determination is made on the basis of available information. Additional data and further analysis beyond that currently available might permit the projection of higher fuel economy levels. Next, the NHTSA balances the difficulties the least capable of these manufacturers would encounter if faced with a standard set above their maximum achievable level against the benefits to the nation of setting the standard at that higher level. As stated in the Conference Report on the Act, the determination of the maximum feasible average fuel economy level

should not be keyed to the single manufacturer which might have the most difficulty achieving a given level of average fuel economy. Rather, the Secretary must weigh the benefits to the nation of a higher average fuel economy standard against the difficulties of individual automobile manufacturers.

S. Rep. No. 94-516, 94th Cong., 1st Sess., at 154-5.

However, if a particular manufacturer's difficulties were due to the nature of its product line, for example, the NHTSA needn't simply set a single standard for all types of NPA's lumped together in a single class. It could use its authority under section 502(b) of the act to establish separate NPA classes and set different standards for those classes. This authority was used to set a separate 1979 standard for general utility vehicles after AM was determined to have a lower capability to improve the fuel economy of its NPA's because of its heavy orientation toward 4-wheel drive vehicles which are inherently less fuel efficient than comparable 2-wheel drive vehicles.

The maximum achievable levels for the individual manufacturers were calculated by combining the technology projections discussed in section IV of this notice, according to the phase-in schedule discussed in section V. The calculation methodology described in section IV

(a) of this notice was used to project 1980 and 1981 capabilities from the current baseline. An example of how this methodology is applied is contained in Appendix B of the RSP. The various technological improvements, when combined according to that schedule, were determined to be fully "additive," consistent with submissions of the manufacturers to the 1981-84 passenger automobile rulemaking docket. Technological improvements are considered to be "additive" if the fuel economy benefit (expressed as a percentage) of the items when used together on the same vehicle is equal to the sum of the benefits of using the items independently on separate vehicles. Certain items such as improved manual and automatic transmissions cannot be employed on the same vehicle and were not considered to be additive in NHTSA's analysis. Using this methodology, the agency determined the maximum levels of fuel economy achievable by the various manufacturers to be as follows:

	1980	1981
General Motors.....	17.8 (18.2)	19.4 (19.7)
Ford.....	19.9 (20.3)	20.5 (20.9)
Chrysler.....	18.4 (18.9)	19.8 (20.3)
American Motors.....	17.6	18.3
International Harvester.....	19.0	20.3
Toyota.....	25.5	26.2
Nissan.....	26.8	27.6
Toyo Kogyo.....	20.4	21.1
Volkswagen.....	22.7	23.6

Note.—Numbers in parentheses reflect inclusion of captive imports.

It is apparent from the above table that the manufacturers with product lines oriented primarily to small trucks, such as Toyota, Nissan, and Toyo Kogyo, have significantly higher achievable average fuel economy levels than do the other companies. Similarly, American Motors, a manufacturer with a product line oriented toward 4-wheel-drive, off-road vehicles, has a relatively low fuel economy improvement potential. The additional equipment necessary for off-road, 4-wheel drive operation, such as a front driving axle, front propeller shaft, transfer case, and skid plates, together with high final drive ratios necessary for use in rough terrain, make these vehicles inherently less fuel efficient than an otherwise identical 2-wheel drive vehicle.

Rather than setting a single NPA standard at a level achievable by these manufacturers, or setting the standard at a level achievable by the manufacturers with a diverse product line but which would be significantly above the capabilities of AM, the NHTSA analyzed the impact of establishing a separate classification for 4-wheel drive NPA's and setting the standard for that class at a level consistent with the capabilities of that class. When the domestic manufacturers' fleets are separated into 2- and 4-wheel drive classes, the maximum fuel economy capabilities of the manufacturers are as set forth below:

[In miles per gallon]

	1980		1981	
	4X2	4X4	4X2	4X4
American Motors.....	23.5	17.6	24.9	18.3
Chrysler.....	19.2(19.7)	15.9(16.3)	20.5(21.0)	17.4(17.8)
Ford.....	20.4(20.8)	17.3(17.7)	20.9(21.4)	18.3(18.6)
General Motors.....	18.4(18.8)	16.2(16.6)	20.0(20.3)	17.7(18.0)
International Harvester.....	19.7	18.9	21.0	20.1

NOTE.—Numbers in parentheses reflect inclusion of captive imports. Sales-weighting and combining the above numbers by manufacturer and model year would obtain the values in the prior table.

In determining the maximum feasible average fuel economy level, NHTSA considered the market shares of the various companies, their ability to absorb civil penalties if imposed, and the impact on total fuel consumption if particular manufacturers' limited capabilities were permitted to depress the level of the standard. If a single standard were established, AM's limited capability could not be permitted to depress the standard because of its relatively small market share (approximately 5 percent) and because setting the standards at that company's projected level, approximately 1 mile per gallon below the average for the domestic manufacturers, could result in substantial additional petroleum consumption. One mpg reduction in the NPA standards could result in nearly 2.9 billion extra gallons of gasoline being consumed over the lives of the 1980-81 NPA's, at a cost of nearly \$2 billion at current pump prices. American Motors' potential civil penalty liability for failing to meet the standards for two years by 1 mpg would be less than one-twentieth that amount by comparison, with the possibility of a reduction in the penalties assessed if payment would seriously jeopardize that company's financial viability. See section 508(b)(3) of the Act.

Similarly, GM's projected level could not be permitted to depress the overall level of the standards because of the company's apparent ability to make fuel economy improvements beyond those projected by NHTSA or, given GM's position as the industry price leader, to pass on to consumers the cost of any civil penalties incurred. As a last resort, GM could absorb civil penalties in view of its recent record profits. Setting the standards at the level of the company next above GM in the projected capability hierarchy would result in a liability of no more than \$35 per vehicle for GM. The per vehicle gasoline savings resulting from setting the standard above GM's level is worth approximately four times that amount at current pump prices. Section VI of the RSP discusses a number of areas, including reducing vehicle performance to a level equivalent to that of Ford and use of marketing techniques to increase sales of fuel efficient NPA's, which could be used to reduce or eliminate even this relatively small penalty. GM is also an industry leader in the use of diesel engines and turbochargers, which have been included only to a limited extent in NHTSA's projections. NHTSA has not included these items in its projection of

maximum achievable fuel economy levels because it lacks data on their impact on sales, or, in the case of diesels, on the environment. Nevertheless, it appears that these methods could be applied without severe impacts on GM's sales or profitability. However, if these additional measures were undertaken by GM, NHTSA's analysis of the economic impact of complying with the standards would understate the actual impact. In the case of passenger automobiles at least, GM has indicated that it would make maximum efforts to comply with standards rather than pay civil penalties.

Applying these considerations to the maximum capabilities projected above, overall maximum feasible average fuel economy levels are 18.4 and 19.8 mpg for 1980 and 1981 respectively, if captive imports were excluded. If captive imports were included up to 6 percent of total NPA sales, the maximum feasible levels would be 18.9 and 20.3 miles per gallon, for 1980 and 1981, respectively.

A similar analysis can be used to determine maximum feasible levels under an approach establishing separate classes for 2- and 4-wheel drive NPA's. The results of this analysis are presented in section VII of the RSP. The projected fuel economy levels for GM's 2-wheel drive and Chrysler's 4-wheel drive NPA's are the lowest of all the manufacturers. GM's 2-wheel drive vehicles are projected to attain fuel economy levels from 0.5 to 0.9 mpg below the next higher manufacturer, while Chrysler's 4-wheel drive NPA's are projected to fall only 0.2 to 0.3 mpg short of the next higher company. The value of the gasoline expected to be saved by setting the fuel economy standards for 2-wheel drive NPA's or 4-wheel drive NPA's at the level of the next higher manufacturer greatly exceeds the potential civil penalty liability. Chrysler, like GM, could reduce performance to the level projected for Ford to achieve further improvement in its average fuel economy, and thereby possibly meet the higher standard for 4-wheel drive NPA's. Even if Chrysler did not take such actions, the impact of penalties of \$10 to \$15 per vehicle for its relatively small number of 4-wheel drive NPA's would not substantially affect sales. As previously noted, GM could likely meet these slightly higher standards for 2-wheel drive NPA's by taking actions beyond those projected by NHTSA. In the absence of such actions, the per vehicle penalties may be less than the difference in profitability between GM and the other domestic companies due to GM's

greater ability to take advantage of economies of scale.

The agency is not proposing standards at even higher levels. That would result in more manufacturers projected to be in noncompliance. Such standards might serve as a disincentive for the manufacturers to make the extra efforts to comply and thereby result in an actual reduction in fuel savings.

If separate 2- and 4-wheel standards were proposed and captive imports excluded beginning in 1980, the standards would be set at 19.2 mpg for 2-wheel drive NPA's and 16.2 mpg for 4-wheel drive NPA's for 1980, and 20.5 mpg and 17.7 mpg for 2- and 4-wheel drive NPA's manufactured in 1981, respectively. If captive imports were included, these numbers would change to 19.7 mpg and 16.6 mpg for 1980, and 21.0 mpg and 18.0 mpg for 1981, for 2- and 4-wheel drive NPA's, respectively.

NHTSA's analysis indicates that there is little difference between the one-standard and two-standard approaches in terms of total petroleum consumption or total civil penalties generated. However, the single standard approach projects civil penalty liability for both GM and AM, while the separate standards approach could result in liability primarily for GM. As noted above, there is reason to believe that GM could either make fuel economy improvements beyond those projected to avoid liability, or could absorb the penalties (or pass them on to consumers) without major difficulty. AM's difficulties cannot be so easily dismissed. That company's ability to absorb civil penalties or to make improvements beyond those projected by NHTSA pales in comparison to GM's. AM would be placed at a severe competitive disadvantage if it were required to raise its prices vis-a-vis the other domestic manufacturers to cover the cost of civil penalties or, for example, to drastically reduce the performance of its vehicles to improve their fuel economy to a level equal to that of the full line manufacturers. Therefore, NHTSA concluded that despite its reluctance to establish multiple classifications, a need exists for separate standards, and separate standards for 2- and 4-wheel drive NPA's will be proposed.

It should be noted that the proposal to establish separate standards was based on the projected fuel economy levels for the various manufacturers as well as competitive considerations. If, as a result of comments received on this notice or other information, the relationship between the projected capabilities of the manufacturers changes, the need for separate standards could also change. Therefore, comment is invited from all interested parties on the question of the appropriateness of separate standards, and possible different classification schemes which could result in reduced energy consumption or civil penalty liability. NHTSA will evaluate all such comments and may adopt a different classification scheme or a single standard in the final rule.

One complication created by the change in NPA classes between the 1979 and 1980 model years ("general utility" vs. "four wheel drive" categories) is in the determination of how monetary credits should be carried over between these years. Section 508(a)(3)(B) of the Act provides that monetary credits can only be applied to offset civil penalties generated in the prior or subsequent year by vehicles in the same NPA class. See also Conference Report, *supra*, at 159. When the class designations change for consecutive model years, it is not clear how this requirement should be applied. One possibility would be to recalculate the civil penalty liability which would have been incurred in one model year if the classification scheme had been the same as for the year in which the credits are generated. For example, if a manufacturer sought to apply 1980 credits earned by its four wheel drive vehicles against a 1979 civil penalty liability for its general utility vehicles, the 1979 liability would be recalculated to determine what that liability would have been if the 1979 general utility vehicle standards had been applicable to all four wheel drive vehicles. One problem with this approach is that the 1979 general utility vehicle standard may not be an appropriate standard for determining penalties for all four wheel drive vehicles, since four wheel drive vehicles other than general utility vehicles may have significantly different fuel economy than the general utility vehicles. A similar problem is presented by a variation of this approach which would entail recalculating the credit as if the classification scheme had not changed.

A second possible approach would note that the 1979 general utility vehicle class approximates the 1980 four wheel drive class more closely than does the 1979 residual category. Under this approach, credits attributed to NPA's in one class could be applied to penalties only for the most closely analogous class in the prior or subsequent model year. One problem with this method is that credits earned in one year might be applied to vehicles outside that class. For example, a credit attributed to 1979 general utility vehicles could be used to offset a civil penalty liability caused entirely by 1980 four wheel drive NPA's other than general utility vehicles. A further complication results from the option granted manufacturers for 1979 to combine all their NPA's into a single class for compliance purposes.

The agency has not yet resolved the question of what is the most equitable method for carrying over credits when the NPA classes change. Comment is invited on this issue from all interested parties, both on the two approaches set forth above and any other approach a party may wish to advance.

IX. MISCELLANEOUS PROPOSED AMENDMENTS

Several minor clarifying changes are also proposed for 49 CFR Parts 523 and 533. These changes are intended to make

the regulations more easily understood and to avoid any possible misinterpretations; no substantive changes are intended to result. Section 523.3(b) of the Vehicle Classification regulations and § 533.5 of the NPA standards have been revised to facilitate future additions or revisions to those sections, where necessary. The definition of "general utility vehicle" has been revised to meet American Motors' concerns over possible damage to the "Jeep" trademark. The definition of "nonpassenger automobile" in § 523.5 has been revised to make clear that the nonpassenger automobile and passenger automobile classes are mutually exclusive.

X. FINANCIAL ASSISTANCE APPLICATIONS

NHTSA invites all qualified individuals and organizations financially unable to participate in this proceeding to apply for financial assistance. On January 13, 1977, the Office of the Secretary of Transportation published a notice (41 FR 2863) establishing a demonstration program of one year duration for funding of individuals or organizations which desire to participate in designated proceedings under various statutes which NHTSA administers, including the Motor Vehicle Information and Cost Savings Act. All applications submitted before the deadline specified in this notice for applications will be examined by an Evaluation Board, composed of NHTSA and Department of Transportation officials, to determine whether each applicant is eligible to receive funding under the regulations. Consideration of late applications is at the discretion of the Evaluation Board.

In general, an applicant is eligible if (1) it represents an interest whose representation can reasonably be expected to contribute to a full and fair determination of the issues in the proceeding, (2) its participation is reasonably necessary to represent that interest, (3) it can competently represent that interest, and (4) it lacks sufficient resources to participate in the absence of such assistance. If more than one applicant representing the same or similar interest is deemed eligible, the Board will either select the applicant which can make the strongest presentation or select more than one applicant if the eligible applicants seek to present significantly different points of view or proposals. Compensation is available only for reasonable out-of-pocket expenses necessary to the applicant's participation, to the extent the program's budget will permit. Payment is made as soon as possible after the selected applicant has completed its work and submitted a claim.

Each applicant should specify in its application which issues it proposes to address if its application for funding is approved, and the nature of its proposed work product. Applicants must submit as part of their application all information required by section 5 of the financial assistance regulations. Failure to submit the required information may result in delays in evaluation and possible dis-

qualification of the application. It is also very important that applicants meet the deadline set forth at the beginning of this notice for submission of applications. Because of the stringent statutory time constraints for this rulemaking proceeding, NHTSA will be unable to accommodate late applicants.

XI. OTHER IMPACTS OF THE STANDARD, SUBMISSION OF PUBLIC COMMENTS, AND THE PUBLIC HEARING

As noted above, the economic impact of the proposed standard has been evaluated in accordance with Executive Orders 11821 and 11949. Copies of this analysis can be obtained from the Office Planning and Evaluation, NHTSA, at the address set forth at the beginning of this notice. The analysis in that document projects an average gasoline savings of 1600 gallons per vehicle over the life of the NPA's produced in 1980-81. The cost of achieving these savings, approximately \$160 per vehicle, is clearly outweighed by the present value of the lifetime gasoline savings, approximately \$760 per vehicle.

The environmental impact of the proposed standards was also evaluated. As with the passenger automobile standards, the agency concluded that efforts to improve vehicle fuel economy will generally have a positive environmental impact, through reduction of petroleum consumption and therefore reduction of the adverse environmental impacts associated with the production, refining, and transfer of petroleum products and through reduction of the quantity of materials used in the manufacture of automobiles. Copies of the Draft Environmental Impact Statement, prepared in accordance with section 102(C) of the National Environmental Policy Act, 42 U.S.C. 4332(C), and related Council on Environmental Quality Guidelines, are available from the Office of Automotive Fuel Economy, at the address given at the beginning of this notice. To briefly summarize, that document demonstrates that the proposed standards would result in the saving of approximately 12 billion gallons of gasoline over the life of the NPA's manufactured in model years 1980-81 compared to their projected 1979 consumption and relatively small impacts on materials usage, air and water quality, and other environmental factors. Materials substitution is expected to result in decreases in the use of cast iron and steel of approximately 0.54 percent, and increases in the use of aluminum and plastics of 2.0 and 0.17 percent, respectively. As discussed above, the question of diesel emissions remains unresolved and is a factor in the agency's limited projections of the use of those engines.

Because of the potential impact of this rulemaking on consumers and the automobile industry, NHTSA will hold a public hearing to provide additional opportunity for interested parties to present their views. The hearing will commence at 8:30 a.m. on Monday, January 16, 1978, at the Federal Aviation Administration Auditorium, 800 Independence

Avenue SW., Washington, D.C. The NHTSA Administrator will preside over the hearing and will be assisted by a panel of DOT and other Federal officials. The hearing will be conducted informally; technical rules of evidence will not apply. However, testimony will be made under oath. Any person desiring to make an oral statement or to submit written material at the hearing must file a notice of such intention and a copy (if practicable, ten copies) of the proposed statement and any supporting material with George Parker, Office of Automotive Fuel Economy, National Highway Traffic Safety Administration, Room 4102, 400 Seventh Street SW., Washington, D.C. 20590, not later than January 12, 1978. Persons desiring to make oral statements should also estimate the duration of their presentation. To the extent possible, participants will be notified in advance about the time at which they may make their presentation. The amount of time allotted per participant will depend on the number of requests to participate which are received. If the requests exceed the available time, witnesses with similar views may be asked to combine their presentations. In the event that, even by limiting the time for each presentation and combining similar presentations, all those desiring to speak cannot be accommodated, witnesses with similar views will be chosen by lot.

Since the public hearing is designed to give interested persons an opportunity to participate in this proceeding by the presentation of data, views, arguments, or other relevant information, there are no adversary parties as such. There will not be any cross-examination of one participant directly by another participant. However, the public may submit written questions to panel members to be propounded by the panel to other participants. Further, the panel members will pose their own questions to the participants.

A verbatim record of the hearing will be made and a copy of the transcript will be made available on request at the expense of the person so requesting.

A period for submission of written comments after the public hearing will be provided to permit participants to supplement their discussion of issues raised in the hearing. The deadline for these submissions is the same as the date specified at the beginning of this notice for submission of comments on the notice. However, participation in the hearing is not a prerequisite to the submission of written comments. All written and oral submissions will be fully considered in the development of these standards.

Interested persons are invited to submit written comments on all aspects of this proposal. Comments must be limited to a total of 15 pages, although additional supporting material may be submitted as appendices or attachments. Comments should refer to Docket Number FE-77-5 and be submitted to the Docket Section at the address provided at the beginning of this notice. It is re-

quested but not required that ten copies of each comment be submitted.

Although comment is invited on all issues implicit in this rulemaking, the attention of all commenters is particularly directed toward several issues which together could affect the level of the final standards by as much as 1 mpg or more. These issues are:

1. The extension of the "automobile" category to include vehicles with GVWR's above 6,000 pounds, and the appropriate upper GVWR limit.

2. The includability of "captive imports" in the calculation of the average fuel economy a domestic manufacturer's nonpassenger automobiles.

3. The accuracy of the procedure used by NHTSA to develop baseline fuel economy data for the NPA's with GVWR's in the 6,001-8,500 pound range.

4. The maximum feasible extent to which lightweight materials such as aluminum and plastics may be substituted for current materials by 1980-81, in view of recent submissions to NHTSA by suppliers of those materials.

5. Minimum acceptable levels of NPA acceleration performance, and the feasibility of using turbochargers to maintain performance while reducing engine size or total drive ratio. To what extent are the problems discussed above regarding turbochargers capable of resolution in 1980-81?

6. Adequacy of leadtime for making the projected improvements. Where greater leadtimes are thought to be necessary, indicate why and how leadtime is necessary.

7. The availability of capital generated from either internal or external sources for the manufacturers to make the projected product improvements, given competing demands on that capital from safety, damageability, emission control, and passenger automobile fuel economy programs.

Commenters on these and other issues should address the extent to which the projections in this notice and the RSP are consistent with the requirement that fuel economy standards be set at maximum feasible levels. Comments should also be supported by specific data which indicate that either higher or lower projections are justified.

If a commenter wishes to submit certain information under a claim of confidentiality, three copies of the complete submission, including purportedly confidential information, should be submitted to the Chief Counsel, NHTSA, at the address given above, and seven copies from which the purportedly confidential information has been deleted should be submitted to the Docket Section. Any claim of confidentiality must be supported by a statement demonstrating that the information falls within 5 U.S.C. section 552(b)(4), and that disclosure of the information would result in significant competitive damage; specifying the period during which the information must be withheld to avoid that damage; and showing that earlier disclosure would result in that damage. In addition,

the commenter or, in the case of a corporation, a responsible corporate official authorized to speak for the corporation must certify in writing that each item for which confidential treatment is requested is in fact confidential within the meaning of section 552(b)(4) and that a diligent search has been conducted by the commenter or its employees to assure that none of the specified items has previously been released to the public.

All comments received before the close of business on the comment closing date indicated above will be considered, and will be available for examination in the Docket Section at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. However, the rulemaking action may proceed at any time after that date, and comments received after the closing date will be treated as suggestions for future rulemaking. The NHTSA will continue to file relevant material as it becomes available in the docket after the closing date, and it is recommended that interested persons continue to examine the docket for new material. Certain relevant materials have already been included in the docket, including certain submissions by the NPA manufacturers in response to fuel economy related questionnaires and special orders issued by NHTSA. These materials, which relate to the fuel economy improvement plans and capabilities of the NPA manufacturers, form part of the basis for these proposed standards, together with the RSP, Economic and Environmental Impact Statements, documents included in the FE 76-01 Docket for the 1981-84 passenger automobile fuel economy standards rulemaking, and other relevant materials. All of these materials should be carefully reviewed by participants in this rulemaking proceeding.

(Sec. 9. Pub. L. 89-670, 80 Stat. 931 (49 U.S.C. 1657); sec. 301, Pub. L. 94-163, 89 Stat. 901 (15 U.S.C. 2002); delegation of authority at 41 FR 25015, June 22, 1976.)

The program official and lawyer principally responsible for the development of this proposed regulation are George L. Parker and Roger C. Fairchild, respectively.

Issued on December 12, 1977.

JOAN CLAYBROOK,
Administrator, National Highway Traffic Safety Administration.

In consideration of the foregoing, it is proposed to amend 49 CFR Chapter V, as follows:

PART 523—VEHICLE CLASSIFICATION

1. By adding the following new definitions to § 523.2:

§ 523.2 Definitions.

The terms "basic vehicles frontal area" and "vehicle curb weight" are used as defined in 40 CFR 86.079-2.

2. By revising § 523.3(b) to read as follows:

§ 523.3 Automobile.

(b) The following vehicles rated at more than 6,000 pounds and less than 10,000 pounds gross vehicle weight are determined to be automobiles:

(1) Vehicles which would satisfy the criteria in § 523.4 (relating to passenger automobiles) if their gross vehicle weight rating were 6,000 pounds or less.

(2) Vehicles which would satisfy the criteria in § 523.5 (relating to nonpassenger automobiles) if their gross vehicle weight rating were 6,000 pounds or less, and which

(i) Have a basic vehicle frontal area of 46 square feet or less,

(ii) Have a vehicle curb weight of 6,000 pounds or less,

(iii) Have a gross vehicle weight rating of 8,500 pounds or less, and

(iv) Are manufactured subsequent to the 1978 model year.

3. By amending paragraph (a) of § 523.5 to read as follows:

§ 523.5 Nonpassenger automobile.

(a) A nonpassenger automobile is an automobile other than a passenger automobile which is either designed for off-highway operation, as described in paragraph (b) of this section, or designed to perform at least one of the following functions:

(1) * * *

PART 533—AVERAGE FUEL ECONOMY STANDARDS FOR NONPASSENGER AUTOMOBILES

4. By deleting the definition of "jeep-type vehicle" in § 533.4(b) and adding the following new definition in its place:

§ 533.4 Definitions.

"Four-wheel-drive, general utility vehicle" means a 4-wheel-drive, general

purpose automobile capable of off-highway operation that has a wheelbase of not more than 110 inches, and that has a body shape similar to 1977 Jeep CJ-5 or CJ-7, or the 1977 Toyota Land Cruiser.

5. By amending § 533.5 to read as follows:

§ 533.5 Requirements.

(a) Each manufacturer of nonpassenger automobiles shall comply with the following average fuel economy standards in the model year specified:

[In miles per gallon]

Model year	2-wheel drive nonpassenger automobiles		4-wheel drive nonpassenger automobiles	
	With captive imports	Without captive imports	With captive imports	Without captive imports
1979....	17.2	-----	15.8	-----
1980....	19.7	19.2	16.6	16.2
1981....	21.0	20.5	18.0	17.7

(b) (1) For model year 1979 each manufacturer may: (i) Combine the fuel economy ratings for its 2- and 4-wheel drive nonpassenger automobiles and comply with the average fuel economy standard in paragraph (a) of this section for 2-wheel drive nonpassenger automobiles; or

(ii) Comply separately with the two standards specified in paragraph (a) of this section.

(2) For model year 1979 only, the standard specified in paragraph (a) of this section for 4-wheel drive nonpassenger automobiles shall apply only to four wheel drive general utility vehicles. All other 4-wheel drive nonpassenger automobiles shall be included in the 2-wheel drive category for compliance purposes.

(3) For model year 1979, the standards specified in paragraph (a) of this section shall not apply to vehicles with gross vehicle weight ratings in excess of 6,000 pounds.

[FR Doc.77-35757 Filed 12-12-77;2:28 pm]